PHASE CHART

	1	2	3 (R) (V)	4 (R) (Y) (G)	5 R Y G	6	7 (R-) (Y-) (G-)	8	9 R Y G	10 R Y G	11 (R) (S) (G)	12 (R) (Y) (G) (G)	13 (R) (Y) (G)	(R) (G) (G) (G)	15 (R) (Y) (G) (G)	16 (R) (Y) (G)	17	18 <u>条</u>	19	20	21	22	
PHASE 1 + 5	∢ G -	∢ G-	∢ G-	R	R	∢ G -	∢ G-	∢ G-	R	R	R	R	R	R	R	R	DW	DW.	DW	DW	DW	DW	
1 + 5 CHANGE THE CONTROLLER MAY SKIP TO PHASES 1 + 6 OR 2 + 5 OR 2 + 6																							
PHASE 1 + 6	∢ G -	⋖ G-	∢ G-	G	G	∢ R-	∢ R-	∢ R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
1 + 6 CHANGE	∢ Y-	∢ Y-	∢ Y	G	G	◄ R-	∢ R−	∢ R-	R	R	R	R	R	R	R	R	DW	D₩	DW	DW	DW	DW	-
PHASE 2 + 5	∢ R-	∢ R-	∢ R-	R	R	∢ G -	∢ G-	∢ G-	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	←
2 + 5 CHANGE	∢ Ŗ−	∢ R-	∢ R-	R	R	∢ Y-	∢ Y –	∢ Y –	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	Ð₩	▼
PHASE 2 + 6	∢ R –	∢ R −	∢ R −	G	G	∢ R-	∢ R-	∢ R-	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	·
PED CLEAR	∢R-	∢ R−	∢ R-	G	G	∢ R-	∢ R−	∢ R-	G	G	R	R	R	R	R.	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	—
2 + 6 CHANGE	∢ R-	∢ R−	∢ R−	Y	Υ	∢ R−	∢ R−	∢ R-	Υ	Y	R	R	R	R	R	R	DW	DW .	DW	DW	DW	DW	·
PHASE 3	∢ R-	∢ R−	∢ R-	R	R	∢ R-	∢ R-	∢ R	R	R	G ⊲ G –	G-	G	R	R	R	DW	DW	DW	DW	DW	DW	◆ ¬ ^
3 CHANGE	∢ R-	∢ R-	∢ R-	R	R	∢ R−	∢ R-	∢ R−	R	R	Y	Υ	Υ	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 4	∢R-	∢ R-	∢ R	R	R	∢ R-	∢ R-	∢ R-	R	R	R	R	R	G −	G −	G	DW	DW	DW	DW	DW	DW	
4 CHANGE	∢ R-	∢ R−	∢ R-	R	R	∢R-	∢ R-	∢ R-	R	R	R	R	R	Y	Y	Υ	DW	DW	DW	DW	DW	DW	♦└▶
PHASE 4 ALT	∢ R-	∢ R−	∢ R−	R	R	∢ R−	∢ R-	∢ R-	R	R	R	R	R	G −	G −	G	DW	DW	DW	DW	WK	WK	١ ١ ١
PED CLEAR	≠ R-	∢ R−	∢ R –	R	R	∢ R−	∢ R-	∢ R	R	R	R	R	G	G -	G -	G	DW	DW	ÐW	DW	FL/DW	FL/ĐW	
4 ALT CHANGE	◄ R-	∢ R−	◄ R-	R	R	◄ R-	◄ R-	∢ R-	R	R	R	R	Y	Y	Y	Υ	DW	DW	DW	DW	DW	DW	•
FLASHING OPERATION	FL∕ ∢ R -	FL∕ ⊲ R-	-FL∕ ∢ R -	FL/Y	FL/Y	FL∕ ∢ R−	FL∕ ⊲ R−	FL∕ ⊲ R−	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	+ 4

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 (BALTIMORE NATIONAL PIKE) AND ROLLING ROAD IN BALTIMORE COUNTY.

US 40 (BALTIMORE NATIONAL PIKE) IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

THIS PROJECT INVOLVES PROVIDING A SIDE STREET SPLIT PHASE FOR ROLLING ROAD, AND CONVERT THE LEAD LAG LEFT TURNS ON US 40 TO STANDARD LEFT TURN PHASING.

II. INTERSECTION OPERATION

- 1. THE INTERSECTION IS TO OPERATE IN A NEMA EIGHT-PHASE, FULLY ACTUATED MODE, WITH THE US 40 (BALTIMORE NATIONAL PIKE) APPROACHES TO RUN CONCURRENTLY. EXCLUSIVE LEFT TURN PHASES SHALL BE MODIFIED TO LEAD LEFT TURNS FOR BOTH APPROACHES OF US 40 (BALTIMORE NATIONAL PIKE) A PEDESTRIAN PHASE WITH PUSHBUTTON ACTUATION SHALL REMAIN IN OPERATION ACROSS THE WEST LEG OF US 40 (BALTIMORE NATIONAL PIKE). THE PEDESTRIAN PHASES ACROSS ROLLING ROAD SHALL REMAIN ON RECALL SPLIT PHASING SHALL BE PROVIDED FOR ROLLING ROAD.
- 2. A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A NEMA SIZE "6" BASE-MOUNTED CABINET SHALL REMAIN IN OPERATION AT THIS INTERSECTION.

III. SPECIAL NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPIATE TERMINALS AND SHALL PROPERLY LABLE EACH CABLE.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

MR. DAVID J. MALKOWSKI DISTRICT ENGINEER PHONE: (410) 321-2810

MR. RANDALL SCOTT
ASSISTANT DISTRICT
ENGINEER - TRAFFIC
PHONE: (410) 321-2781

MR. SUENETTE POPE UTILITY ENGINEER PHONE: (410) 321-2841

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF TRAFFIC OPERATIONS
(410) 787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7650

(SIGNAL SHOP WAREHOUSE) (410) 787-7668

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

ITEM NO. QUANTITY DESCRIPTION

EQUIPMENT LIST "B"

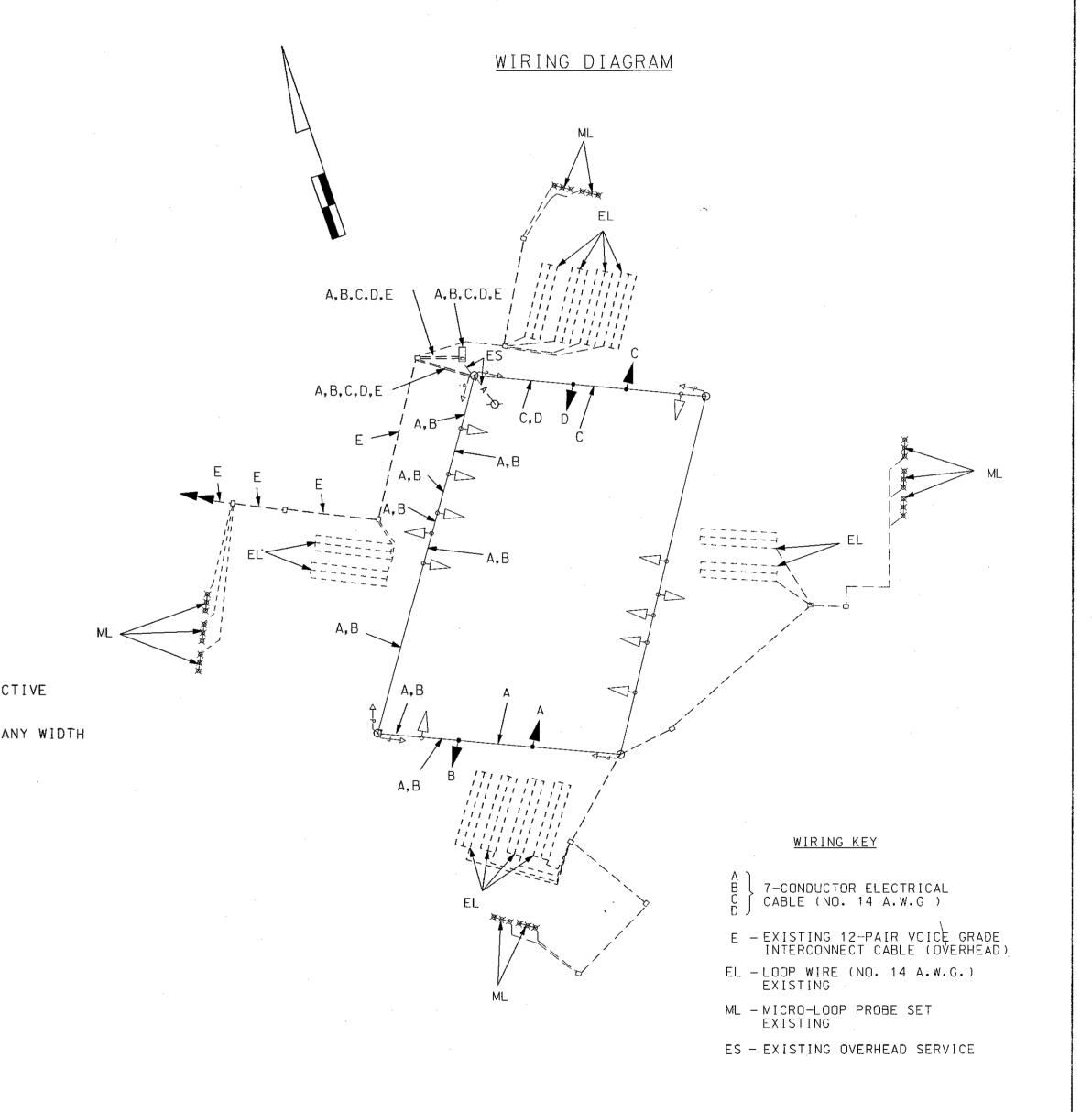
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR:

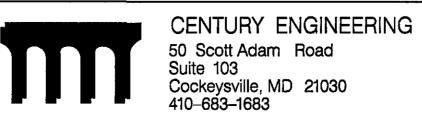
THERMOPLASTIC PAVEMENT MARKINGS	ITEM NO.	QUANTITY	DESCRIPTION
THERMOPLASTIC PAVEMENT MARKINGS 5005 150 L.F. REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY 8007 1 EACH ADJUST EXISTING SPAN WIRE. 8013 1 EACH. REMOVE AND DESPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT. 8052 6 EACH FURNISH AND INSTALL 8 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACE). 8053 10 EACH FURNISH AND INSTALL 12 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACED). 8059 925 L.F. FURNISH AND INSTALL ELECTRICAL CABLE -	1001	1 EACH	MAINTENANCE OF TRAFFIC
8007 1 EACH ADJUST EXISTING SPAN WIRE. 8013 1 EACH. REMOVE AND DESPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT. 8052 6 EACH FURNISH AND INSTALL 8 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACE). 8053 10 EACH FURNISH AND INSTALL 12 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACED). 8059 925 L.F. FURNISH AND INSTALL ELECTRICAL CABLE —	5001	150 L.F.	FURNISH AND INSTASLL 5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8013 1 EACH. REMOVE AND DESPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT. 8052 6 EACH FURNISH AND INSTALL 8 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACE). 8053 10 EACH FURNISH AND INSTALL 12 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACED). 8059 925 L.F. FURNISH AND INSTALL ELECTRICAL CABLE —	5005	150 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIL
PER ASSIGNMENT. 8052 6 EACH FURNISH AND INSTALL 8 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACE). 8053 10 EACH FURNISH AND INSTALL 12 INCH VEHICLE SIGNAL HEAD SECTION (BLACK FACED). 8059 925 L.F. FURNISH AND INSTALL ELECTRICAL CABLE -	8007	1 EACH	ADJUST EXISTING SPAN WIRE.
HEAD SECTION (BLACK FACE). 8053	8013	1 EACH.	
HEAD SECTION (BLACK FACED). 8059 925 L.F. FURNISH AND INSTALL ELECTRICAL CABLE -	8052	6 EACH	
	8053	10 EACH	
	8059	925 L.F.	

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7941 CONNELY DRIVE, HANOVER, MARYLAND 21076.

NOTE: 1. ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR





MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

US 40 & ROLLING ROAD

 DRAWN BY:
 D.L.A.
 F.A.P. NO.:
 AC-STPG-000S(857)E
 TS NO.
 SHEET NO.

 CHECKED BY:
 D.L.A.
 S.H.A. NO.:
 BALTIMORE
 T.I.M.S. NO.
 T.I.M.S. NO.
 F-632X
 2 OF
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